

**REMARKS**

**Interview summary**

Applicants thank the Examiner for the courtesy of conducting a telephonic interview on June 13, 2006.

**Claims status and formal matters**

Claims 1, 4 and 8 are currently amended. Claims 11-24 have been withdrawn by the Examiner. Claims 39-75 are new.

These amendments raise no issue of new matter. Support for the amendments in claims 39-75 can be found, *inter alia*, in [0010], [0028], [0029], [0032], [0033], [0038], [0045], [0046] in the application as published.

**Rejections Under 35 U.S.C. §102**

*Fodor et al., US Publication 2001/0053519*

The Examiner rejected claims 1, 2, 4, 5, 8, 25, and claims 27, 29, and 35 under 35 U.S.C. §102(b) as anticipated by Fodor et al. According to the Examiner, Fodor et al. teaches “an array which comprises every possible sequence of 10 residues of DNA.”

In reply, applicants traverse the rejection. Without conceding the correctness of the Examiner’s position and to expedite prosecution, applicants have amended the claims to recite “synthetic nucleic acid which has a sequence consisting of from 13 to about 30 consecutive nucleotides.” Therefore, Fodor et al. do not anticipate the claimed invention. In view of this amendment, applicants request the Examiner reconsider and withdraw this ground of rejection.

*Rappuoli et al., WO 2004/092360*

The Examiner rejected claims 1-6, 8, 9, 25-32, 34-38 as anticipated by Rappuoli et al. under 35 U.S.C. §102(e).

In reply, applicants traverse the rejection and assert that the reference is not prior art as to the claimed invention. Pursuant to 37 C.F.R. §1.131, applicants submit herewith a Declaration of the named inventors establishing invention of the subject matter of the rejected claims at least prior to the effective date of the reference, i.e. April 12, 2003.

The Examiner indicated that the effective filing date of the Rappuoli et al. reference is the filing date of priority application U.S. application 60/463109, April 14, 2003. The Declaration shows evidence of conception of the invention prior to the effective date of the reference coupled with due diligence to a subsequent reduction to practice or to filing of the present application. In view of the attached Declaration, Rappuoli et al. is not prior art as to the claimed invention. Applicants respectfully request the Examiner reconsider and withdraw this ground of rejection.

*Genbank locus AY274119*

The Examiner rejected the claims as anticipated by the above Genbank entry dated April 14, 2003. In the Office Communication of July 15, 2005, the Examiner also contended that the website "SARS-associated Coronavirus" had similar sequence data publicly available 2 days earlier.

In reply, applicants traverse the rejection and assert that the reference is not prior art as to the claimed invention. Pursuant to 37 C.F.R. §1.131, applicants submit herewith a Declaration of the named inventors establishing invention of the subject matter of the rejected claims at least prior to the effective date of the reference, i.e. April 12, 2003. The Declaration shows evidence of conception of the invention prior to the effective date of the reference coupled with due diligence to a subsequent reduction to practice or to filing of the present application. In view of the attached Declaration, the above-listed

Genbank entry is not prior art as to the claimed invention. Applicants respectfully request the Examiner reconsider and withdraw this ground of rejection.

**Rejections Under 35 U.S.C. §103**

*Fodor et al. US 2001/0053519*

The Examiner rejected claims 31 and 32 under 35 U.S.C. §103(a) as being obvious over Fodor et al.

In reply, applicants traverse the rejection. The claims have been amended to recite the length of “from 13 to about 30 nucleotides.” In view of the arrays disclosed in Fodor et al. one of ordinary skill in the art would not have found the synthetic nucleic acids or methods of the claimed invention obvious. Claims 31 and 32 depend from claims that recite a lower limit of 13 nucleotides. In view of these amendments, applicants respectfully request the Examiner to reconsider and withdraw this ground of rejection.

*Combined teachings of Ksiazek et al. (2003), Genbank locus AY274119 and either Vabret et al. (2001) or Stewart et al. (1995)*

The Examiner rejected claims 1-6, 8, 9, 25-32, 34, 35, and 38 as obvious under 35 U.S.C. §103 over the combined teachings of Ksiazek et al. (2003) New England Journal of Medicine 348(20):1953-1966, published online on April 10 (the Ksiazek reference), Genbank Accession AY274119 and either Vabret et al. (2001) Journal of Virological Methods 97:59-66 (The Vabret reference) or Stewart et al. In: Y.Becker and G.Darai,Eds, Diagnosis of Human Viruses by Polymerase Chain Reaction Technology, Springer-Verlag, New York (1995), pp.316-327 (the Stewart reference).

In reply, applicants traverse the rejection. First, applicants point out that the Genbank reference is not proper prior art under 35 U.S.C. § 102 in view of the Declaration pursuant to 37 C.F.R. §1.131 which is submitted herewith. In turn, the Genbank reference is therefore not proper prior art under 35 U.S.C. §103. The Ksiazek

reference does not teach or suggest the use of PCR primers located in any other portion of the SARS genome. Neither Vabret nor Stewart teach any nucleic acids from the SARS genome since the SARS virus and its genome were not identified until April 2003. Indeed, neither Ksiazek, nor Vabret nor Stewart teach the genomic sequence of the SARS coronavirus, let alone any sequences from the N-gene and the 3' region of the SARS coronavirus.

In view of the foregoing, applicants maintain that without the Genbank reference neither the Ksiazek reference, nor Stewart nor Vabret, nor the combination of the three references, teaches or suggests the synthetic nucleic acids sequences or methods as claimed. Applicants respectfully request the Examiner to reconsider and withdraw this ground of rejection.

### **Conclusion**

For the reasons stated above, applicants request that the Examiner withdraw the grounds for rejection and allow the pending claims to proceed to issue. If the Examiner has any questions, she is invited to call the undersigned attorney.

Authorization is given to apply any charges that may be due, or any credits owed, to Deposit Account No. 08-0219.

Respectfully submitted,



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